

### **ABSTRACT OF THE DISCLOSURE**

In a method and apparatus for determining the circumference of a finger or toe joint, in particular a proximal interphalangeal joint, to be evaluated in the context of an arthritis examination of an examination subject, the joint is irradiated using a light source and at least one two-dimensional projection image is recorded using a camera apparatus. From the projection image, the diameter of the joint is determined by means of an automatic edge detection method, and the circumference is calculated on the basis of the diameter. Additionally, a diaphanoscopic examination of the joint can be made with the same apparatus, and the results combined with the diameter information to identify or monitor a degree or progress of the inflammation.